

ABSTRACT

A fuel filter includes mating housing portions defining an interior cavity. A pipe in the housing includes a central flow passage with an opening along the length of the pipe, and an exterior groove. A latch device with discrete fingers closely surrounds the pipe and is engageable with the groove to prevent the latch device (68) from moving axially along the pipe. The latch device has an annular sleeve, radially-outwardly spaced from the fingers. A moveable valve device surrounds the pipe and has a valve sleeve normally covering the opening in the pipe. An annular base on the sleeve includes radially projecting tabs defining a plurality of slots. A filter element is removeably located in the housing and has an end cap with a valve actuating portion. The valve actuating portion includes a cylindrical portion and an annular base projecting radially inward from the cylindrical portion. The valve actuating portion includes a plurality of thin, flat keys spaced around the annular base and projecting radially inward from the cylindrical portion and axially outward from the base. The keys have first portions which project through the slots in the valve device and engage the sleeve of the latch device to unlock the latch device from the pipe, and second portions which engage the base of the valve device and move the valve device to uncover the opening in the pipe, when the filter element is inserted into the housing.